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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,130	12/18/2001	Zhiming Zhou	56008US002	5126

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EXAMINER

MOORE, MARGARET G

ART UNIT PAPER NUMBER

1712

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,130

Applicant(s)

ZHOU ET AL.

Examiner

Margaret G. Moore

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 and 32 is/are allowed.
- 6) ☒ Claim(s) 1 to 29, 31, 33 to 38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 1712

1. Claim 31 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Page 15, lines 14 to 16, provides support for a primer composition disposed on an adhesive which is in turn disposed on a surface. The specification does not enable a polydiorganosiloxane polyurea copolymer used as a primer and containing a silicate tackifying resin. Only when the polydiorganosiloxane polyurea copolymer is used as an adhesive does it contain such a resin. Thus the Examiner cannot find support for this claim in the specification.

2. Consistent with that noted in the corresponding PCT application, the Examiner refers to 5,106,951 as providing examples of electron rich groups. Column 6, lines 48 to 53 disclose that electron rich groups include carboxylates and groups containing heteroatoms with unshared pairs of electrons such as oxygen and nitrogen.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 to 6, 8 to 14, 16 to 26, 29 and 33 to 38 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 380 236, herein referred to as Leir.

Leir teaches polyurea polydiorganosiloxane copolymers and pressure sensitive adhesives prepared therefrom. Leir shows copolymers containing tertiary amine groups (applicants' preferred electron rich groups as found in claim 2) as well as copolymers containing carboxylate groups and polypropylene oxide groups (which meet the broad limitation of electron rich groups). See for instance Example 31 (carboxylate groups), Example 34 (polypropylene oxide groups) and Example 32 (tertiary amine groups that are not protonated). These copolymers are cast onto a surface and dried, thus forming

Art Unit: 1712

a solvent free primer composition as claimed. Note also the teachings starting on page 7 which state that only a small amount of ionized groups are desirable. Considering the amount of tertiary amine groups in, for instance, the copolymer of Example 33, it would appear that un-ionized tertiary amine groups are inherently present in this copolymer. Page 8 also teaches that the amine group containing polymer can be utilized in its un-ionized form. As such Leir clearly teach polyurea polydiorganosiloxane copolymers having tertiary amine groups and anticipates the claims.

See page 3, which teaches the structure of claim 10. Page 9 discloses adding to these copolymers a silicate resin to form a silicone pressure sensitive adhesive. Note that this adhesive can be coated onto tapes by hot melt extrusion, further meeting the solvent-free limitation. Also note that the copolymers prepared in the examples meet the limitation of claim 8.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 15, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leir.

With regards to claims 7, 15 and 27, the Examiner notes that Leir does not specifically teach applying the copolymers therein to a surface having acidic groups, but in view of the teachings in Leir indicating the general utility of the copolymers as coatings and adhesives, one having ordinary skill in the art would have readily recognized that acidic group containing surfaces could certainly be used as substrates, thereby rendering obvious the instant claims. In fact, since the skilled artisan would recognize that the tertiary amine groups in Leir would be inherently attracted to acidic groups, the selection of such a surface would have clearly been desirable to the skilled artisan.

Art Unit: 1712


With regards to claim 28, the teachings in Leir indicate that the copolymer therein has adhesive properties; thus the skilled artisan would have had a reasonable expectation of success in applying the copolymer adhesive to the surface of a foam.

7. Claims 30 and 32 are allowed. The prior art fails to teach or suggest such a layered adhesive product.

8. The remaining references are cited as being of general interest. WO 00/75210 teaches polyurea polysiloxane copolymers having polyoxyalkylene groups, but since Leir also show such copolymers, this reference was not applied against the instant claims. Kangas et al. teach tackified polydiorganosiloxane polyurea copolymers and adhesives, but fail to teach or suggest the electron rich groups as required. Kim et al., Mougin et al. and Shores each teach copolymers that can include polyurea linkages as well as ionic or amine groups, but none of these references are closer to the instant claims as Leir.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
1/19/04